

1884 + 1888  
1236 to 1285

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1236 to 1285

10-25 AM Log no. 86.00

Menomsha Bight

1 25 miles south of Minn

15  
40  
2

82 14 1/2

41.72

Long 80° 70-49

14 30

80° 8

40.57.30 N

70 57

70 58 N

Lat 80° 41.12.00

80° 14-30

41.57.30

1247 80° 41.12.00 3/8 miles

1248 " " " 3/8 "

1887 & 1888

1236

Specimens obtained  
~~At~~ ~~Time~~

Horned starfish dead shell  
Cannons.

# TEMPERATURE RECORD.

Instrument used, Barometer

Current number of observation, 1236

Date, Aug 30 1887

Locality, Brock Island Sound

Bearings, Gayhead Light NNE  $\frac{1}{2}$  E Catthunket N + E

Roman's Land 66° E  $\frac{3}{4}$  S

Time of day, 9.03 AM, of tide, W

State of sky, Sc

Temperature of air, 65

" surface of water, 62

" at depth of fathoms,

" of bottom, 60

Depth, in fathoms, 19.5  
Hard

Nature of bottom, Wind SSW  
Wind 2

Force of surface current, drift S E  $\frac{3}{4}$

Force of bottom current,

Name of vessel, 26 & 3 Fish Hawk

To what service attached, 26 & 7 6

Name and rank of commanding officer, James A. Smith  
Mate W.F.W.

Name and position of observer

J. M. Livingston

Mate W.F.W.

8671826

1237

REMARKS.

Specimens obtained  
Horned Shells, Lobsters  
Skate Eel

# TEMPERATURE RECORD.

Instrument used, Beaufort

Current number of observation, 1237

Date, Aug 30<sup>th</sup> 1887

Locality, Block Island Sound

Bearings, Gayhead Lt - G X N

True Name Land 56 1/2 E 5 1/2 S Cettly Banks N 6 X W

Time of day, 12 M<sup>th</sup> M<sup>th</sup>; of tide, W

State of sky, Partly cloudy

Temperature of air, 67

" surface of water, 64

" at depth of fathoms,

" of bottom, 58

Depth, in fathoms, 20

Nature of bottom, Hard

Direction of surface current, Wind Soalm

Force of surface current, Wind 0

Direction of bottom current, drift

3/4

Force of bottom current,

Name of vessel, 2688 Fish Hawk

To what service attached, 26876

Name and rank of commanding officer, James A. Smith

Name and position of observer,

John W. Johnson

Master

USNavy

1238

REMARKS.

Specimens obtained

Broken oyster shells + rocks

1.5 miles offshore - second

## TEMPERATURE RECORD.

Instrument used, *Dodge*

Current number of observation, 1238

Date, Aug 30<sup>th</sup> 1887

Locality, Block Island Sound

Bearings, Gay Head Lt. S 1/8 to

Leuty Banks NE 1/4 of 1/8 of 20 acre Land E & E

Time of day, 10.45 a.m.; of tide, 24

State of sky, *de*

Temperature of air, 65°

" surface of water, 64

" at depth of fathoms,

" of bottom, 61

Depth, in fathoms, 205

Nature of bottom, Sand & broken shell

Wind South

Direction of surface current;  
Wind 2

Direction of ~~bottom current~~

Force of bottom current,  
Name of vessel 2688 Fish Hawk

To what service attached 86676

Name and rank of commanding officer *James A. Smith*

Name and rank of commanding officer  
Major F. M.

Name and position of observer,

1. *Leptenigia*  
2. *Malanga*

1239

REMARKS.

Specimens obtained  
Skate Sculpin Gobies flounders



1. ~~1000~~ 1000

2. ~~1000~~ 1000

3. ~~1000~~ 1000

4. ~~1000~~ 1000

5. ~~1000~~ 1000

6. ~~1000~~ 1000

7. ~~1000~~ 1000

8. ~~1000~~ 1000

9. ~~1000~~ 1000

10. ~~1000~~ 1000

11. ~~1000~~ 1000

12. ~~1000~~ 1000

13. ~~1000~~ 1000

14. ~~1000~~ 1000

15. ~~1000~~ 1000

16. ~~1000~~ 1000

17. ~~1000~~ 1000

18. ~~1000~~ 1000

19. ~~1000~~ 1000

20. ~~1000~~ 1000

21. ~~1000~~ 1000

22. ~~1000~~ 1000

23. ~~1000~~ 1000

24. ~~1000~~ 1000

25. ~~1000~~ 1000

26. ~~1000~~ 1000

27. ~~1000~~ 1000

28. ~~1000~~ 1000

29. ~~1000~~ 1000

30. ~~1000~~ 1000

31. ~~1000~~ 1000

32. ~~1000~~ 1000

33. ~~1000~~ 1000

34. ~~1000~~ 1000

35. ~~1000~~ 1000

36. ~~1000~~ 1000

37. ~~1000~~ 1000

38. ~~1000~~ 1000

39. ~~1000~~ 1000

40. ~~1000~~ 1000

41. ~~1000~~ 1000

42. ~~1000~~ 1000

43. ~~1000~~ 1000

44. ~~1000~~ 1000

45. ~~1000~~ 1000

46. ~~1000~~ 1000

47. ~~1000~~ 1000

48. ~~1000~~ 1000

49. ~~1000~~ 1000

50. ~~1000~~ 1000

51. ~~1000~~ 1000

52. ~~1000~~ 1000

53. ~~1000~~ 1000

54. ~~1000~~ 1000

55. ~~1000~~ 1000

56. ~~1000~~ 1000

57. ~~1000~~ 1000

58. ~~1000~~ 1000

59. ~~1000~~ 1000

60. ~~1000~~ 1000

61. ~~1000~~ 1000

62. ~~1000~~ 1000

63. ~~1000~~ 1000

64. ~~1000~~ 1000

65. ~~1000~~ 1000

66. ~~1000~~ 1000

67. ~~1000~~ 1000

68. ~~1000~~ 1000

69. ~~1000~~ 1000

70. ~~1000~~ 1000

71. ~~1000~~ 1000

72. ~~1000~~ 1000

73. ~~1000~~ 1000

74. ~~1000~~ 1000

75. ~~1000~~ 1000

76. ~~1000~~ 1000

77. ~~1000~~ 1000

78. ~~1000~~ 1000

79. ~~1000~~ 1000

80. ~~1000~~ 1000

81. ~~1000~~ 1000

82. ~~1000~~ 1000

83. ~~1000~~ 1000

84. ~~1000~~ 1000

85. ~~1000~~ 1000

86. ~~1000~~ 1000

87. ~~1000~~ 1000

88. ~~1000~~ 1000

89. ~~1000~~ 1000

90. ~~1000~~ 1000

91. ~~1000~~ 1000

92. ~~1000~~ 1000

93. ~~1000~~ 1000

94. ~~1000~~ 1000

95. ~~1000~~ 1000

96. ~~1000~~ 1000

97. ~~1000~~ 1000

98. ~~1000~~ 1000

99. ~~1000~~ 1000

100. ~~1000~~ 1000

LEWIS & CLARK SECOND

# TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1239

Date, August 30<sup>th</sup> 1887

Locality, Block Island Sound

Bearings, Ken + Chicken Light-Ship N 67° 30' E

Cutterbank Lt W 6. 8 fms. from land E 83° 1/4 E

Time of day, 11. 35 am; of tide, W

State of sky, clear

Temperature of air, 65

" surface of water, 62

" at depth of fathoms,

" of bottom, 61

Depth, in fathoms, 16

Nature of bottom, Hard

Direction of wind SW

Force of wind 2

Direction of bottom current, W 1/2

Force of bottom current,

Name of vessel, U.S.S. Fish Hawk

To what service attached, U.S. & G.

Name and rank of commanding officer, Sam'l Smith  
Mate 1st class

Name and position of observer,

John W. Johnson

Mate U.S.A.

1245

REMARKS.

Specimens Obtained  
Hake, Sharts & Monk fish  
Flounders & Star Fish

## TEMPERATURE RECORD.

Instrument used, Bean Trawl

Current number of observation, 1245

Date, August 30<sup>th</sup> 1887

Locality, Block Island Sound

Bearings. Bayard. Sound Lt Ship N 70° 10'  
head E 83° 8' to Moon Land S 82° 2'

Time of day, 12:44 P.M.; of tide, W

State of sky. *2c*

Temperature of air 64

" surface of water. 62

at depth of fathoms.

" of bottom. 60

or bottom, 18.5  
Depth, in fathoms.

Nature of bottom, *Blue sand*

Direction of surface current *Wind SW*

Force of mind 2

Force of ~~surprise~~ - ~~surprise~~ -

### Kinds of bottom current

Name of vessel, U.S. Fish Hawk

To what service attached 16870

Name and rank of commanding officer: *James A. Smith*

Name and rank of commanding officer:

Name and position of observer.

Bruleyka

Waterhouse

1246

REMARKS.

Specimens obtained  
dead shells from water

# TEMPERATURE RECORD.

Instrument used, *sonde*

Current number of observation, *124*

Date, *Sept 5<sup>th</sup>* 1887

Locality, *Coney Island sound*

Bearings, *Bishop's Harbor St E  $\frac{3}{4}$  t*  
*Buccaneer Light Ship W  $\frac{1}{4}$  t  $\frac{3}{4}$  t*

Time of day, *10.27* ; of tide, *E*

State of sky, *bc*

Temperature of air, *70*

" surface of water, *68*

" at depth of fathoms,

" of bottom, *69.5*

Depth, in fathoms, *21*

Nature of bottom, *loose broken shell*

Direction of surface current, *wind East*

Force of surface current, *Wind* *2*

Direction of ~~bottom~~ current, *rift* *ebb E* *1/4*

Force of bottom current, *ebb*

Name of vessel, *26 b & S Fish Hawk*

To what service attached, *26 b & S*

Name and rank of commanding officer, *James S. Smith*  
*Master 26 fm*

Name and position of observer,

*John H. Green*

*Second Lieut.*

1242

REMARKS.

Specimens Obtained

Spider Crabs. Horseshoe Crabs  
Starfish and dead ~~shells~~<sup>and</sup>  
live shell + Squid.

# TEMPERATURE RECORD.

Instrument used, Beaufort

Current number of observation. 1242

Date, Sept 5<sup>th</sup> 1887

Locality, Vincent Sound

Bearings, Bishop & Clerke Lt- E 1/2 E  
Succosset Lt Ship N 1/4 W

Time of day, 10.50 AM; of tide, E

State of sky, Partly

Temperature of air, 70

" surface of water, 68

" at depth of fathoms,

" of bottom, 69.

Depth, in fathoms, 18

Nature of bottom, Sand & Shell

Direction of wind East

Force of wind 2

Direction of drift W N W 1/4

Force of bottom current,

Name of vessel, U. S. Fish Hawk

To what service attached, U. S. F. C.

Name and rank of commanding officer, James K. Smith  
Mate

Name and position of observer,

John H. L. Moore  
Master Mariner

1248

REMARKS.

specimens of Alcyonium  
readable brach. sponge

# TEMPERATURE RECORD.

Instrument used, Dryg S

Current number of observation, 1248

Date, Sept 5<sup>th</sup> 1887

Locality, Vineyard Sound

Bearings, Bishop & Clarke Lt E $\frac{1}{2}$  t

Succosset Lt Shp W $\frac{1}{4}$  t

Time of day, 11/15 Am; of tide, E

State of sky, Sc

Temperature of air, 70

" surface of water, 68

" at depth of      fathoms,

" of bottom, 29-5

Depth, in fathoms, 15.5

Nature of bottom, Sand shell rocks

Direction of ~~surface current~~ Wind East

Force of ~~surface current~~ Wind 2

Direction of ~~bottom current~~ Swift N X E 44

Force of bottom current.

Name of vessel, U.S. Fish Hawk

To what service attached, U.S. & C

Name and rank of commanding officer, James A. Smith  
Master

Name and position of observer,

Ambridge  
Master

1244

REMARKS.

Specimens obtained  
from the shells

# TEMPERATURE RECORD.

Instrument used, therm

Current number of observation, 1244

Date, Sept 5<sup>th</sup> 1887

Locality, Vineyard Sound

Bearings, Hyannis or E X 4° 18' S

Bishop & Clark's Se 8° N - Greenwich St Ship W 1/2 S

Time of day, 11.54 A.M.; of tide, W

State of sky, clear

Temperature of air, 70

" surface of water, 67

" at depth of fathoms,

" of bottom, 69.5

Depth, in fathoms, 5.5

Nature of bottom, sand mixed shell

Direction of Wind current, Smooth

Force of Wind surface current, 2

Direction of wave bottom current, W X N 1/4

Force of bottom current.

Name of vessel, Seabird Fish Hawk

To what service attached, 16876

Name and rank of commanding officer, James Smith  
Captain

Name and position of observer,

W. M. Bright

Master 26 fm

1245

REMARKS.

Specimens obtained

Winkles - Hermit Crabs  
a few live Clams and  
many dead Clam shells  
Kelp weeds & Eel grass  
a few small fish - Skulp and  
sea robins

# TEMPERATURE RECORD.

Instrument used, *Beaufort*

Current number of observation. *1245*

Date, *Sept 5<sup>th</sup> 1887*

Locality, *Off Keyaunis*

Bearings *Keyaunis St N 8<sup>1</sup>/<sub>4</sub> E*

*Bishop & Clerks St E 8<sup>1</sup>/<sub>4</sub> S* <sup>lathline</sup> *Beacon*

Time of day, *12, 22 P.M.* of tide. *W*

State of sky, *8-9*

Temperature of air, *68*

.. surface of water, *68*

.. at depth of fathoms,

.. of bottom, *69.5*

Depth, in fathoms, *4.5*

Nature of bottom, *Sand & Shell*

Direction of ~~surface~~ *Mud* current, *South*

Force of ~~surface~~ *wind* current, *3*

Direction of ~~bottom~~ *W* current, *W x N*

Force of bottom current,

Name of vessel, *Wood Fish Hawk*

To what service attached, *Co. S. & G.*

Name and rank of commanding officer, *James S. Smith*

Name and position of observer,

*J. Melington*  
*Mate M.F.H.*

1246

REMARKS.

Specimens Obtained  
Ischios Horse shoe Crabs  
Stone

# TEMPERATURE RECORD.

Instrument used, *Beaufort*

Current number of observation, 1246

Date, *Sept 5<sup>th</sup> 1887*

Locality, *Off Hyannis*

Bearings, *Northeast 46 $\frac{1}{2}$ ° N*

*Collin Beacon N due east 30.8 N 74.8*

Time of day, *1 PM* ; of tide, *N*

State of sky, *clear*

Temperature of air, *68*

" surface of water, *68*

" at depth of fathoms,

" of bottom, *69.5*

Depth, in fathoms, *5-5*

Nature of bottom, *Sand & Shell*

Direction of ~~surface current~~, *Final SW*

Force of ~~surface current~~, *weak 2*

Direction of ~~bottom current~~, *WxW 1/2*

Force of bottom current,

Name of vessel, *Glass Fish Hawk*

To what service attached, *16876*

Name and rank of commanding officer, *James Smith  
Mate w/*

Name and position of observer,

*J. M. Livingston  
Mate w/*

1247

REMARKS.

Specimens obtained  
sand dollar, starfish  
Halibut, Skate, flounders & shells  
Sea anemones, Actinia, Actinaria.

1247

## TEMPERATURE RECORD.

Instrument used, Barometer

Current number of observation, 1247

Date, Sept 6<sup>th</sup> 1887Locality, South of Martha's Vineyard 25

Bearings,

Lat 41° 00' 45" Lon 71° 00' 05"Time of day, 9.49 a.m.; of tide, LowState of sky, Partly cloudyTemperature of air, 67" surface of water, 65" at depth of 15 fathoms, 62" of bottom, 53.5Depth, in fathoms, 27Nature of bottom, SandDirection of surface current, Mud SWForce of surface current, Wind 4Direction of bottom current, W 8 1/2 N 3/4

Force of bottom current,

Name of vessel, H. B. Fish HawkTo what service attached, 26876Name and rank of commanding officer, James A. Smith  
Master Warrant Officer

Name and position of observer,

BethelingtonMatthews

1248

REMARKS.

Specimens obtained  
Gone Fish Flounder Pectens  
Halibut, Yellow sponge, Sea Robbins  
Sand dollars.

# TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1248

Date, Sept 6<sup>th</sup> 1887

Locality, South of Martha's Vineyard

Bearings, 1 mile S & E of East Beach Lat 41.0200 Long 71.00.00

Time of day, 10.30 a.m. of tide,

State of sky, Partly cloudy

Temperature of air, 68

" surface of water, 64

" at depth of 15 fathoms, 63

" of bottom, 55

Depth, in fathoms, 26.5

Nature of bottom, Sand

Direction of surface current, SW

Force of surface current, 4

Direction of bottom current, SW 45 1/2 S 1/8

Force of bottom current,

Name of vessel, U.S. Fish Hawk

To what service attached, U.S. Fish Commission

Name and rank of commanding officer, James S. Smith  
Captain

Name and position of observer,

W. M. Ladd

Mate 26 f.m.

1249

REMARKS.

Specimens obtained  
near dolls on floor and back  
Skate Sculpin

# TEMPERATURE RECORD.

Instrument used. Beam Trawl

Current number of observation, 1249

Date, Sept 6<sup>th</sup> 1887

Locality, South of Martha's Vineyard 2 miles

2 miles S. E. of West Dennis 2 miles

Lat 41° 0' 45" Lon 70° 59.34"

Time of day, 11.29 AM, of tide,

State of sky, clear

Temperature of air, 67

" surface of water, 64

" at depth of 12 fathoms, 63

" of bottom, 57

Depth, in fathoms, 22.5

Nature of bottom, sand

Direction of wind SW

Force of surface current weak

Direction of bottom current NE 1/8

Force of bottom current,

Name of vessel, U.S.S. Fish Hawk

U.S. F. H.

To what service attached,

Name and rank of commanding officer, James A. Smith  
Captain

Name and position of observer,

J. M. Brighten

Cook 2d class

1850

REMARKS.

Specimens Obtained

Horned sand eel or  
shell back Saelpin

# TEMPERATURE RECORD.

Instrument used, Beaufort

Current number of observation, 1450

Date, Sept 6<sup>th</sup> 1887

Locality, south of Martha's Vineyard

Bearings, 2 miles S 4 E of last bearing

Lat 41° 06.00' Lon 70° 59.15'

Time of day, 12.30 P.M.; of tide, —

State of sky, Cloudy

Temperature of air, 67

" surface of water, 64

" at depth of 10 fathoms, 65

" of bottom, 58.5

Depth, in fathoms, 20.5

Nature of bottom, Sand

Direction of wind, SW

Force of wind, 4

Direction of bottom current, N 64 E

Force of bottom current,

Name of vessel, U.S. Fish Hawk

To what service attached, U.S. Fish Hawk

Name and rank of commanding officer, James A. Smith  
Mate U.S.A.

Name and position of observer,

W. M. L. Mather  
Master's Mather

## REMARKS.

Specimens Obtained  
Shore sand below high  
Glenden Sculpin

# TEMPERATURE RECORD.

Instrument used, Beam Gravel

Current number of observation, 1254

Date, Sept 6<sup>th</sup> 1887

Locality, South of Martha's Vineyard

Bearings, 4 miles S E of East Dennis  
Lat 41° 10.00' Lon 70° 09.15'

Time of day, 1. 36 PM; of tide.

State of sky, clear

Temperature of air, 67

.. surface of water, 64

.. at depth of 10 fathoms, 62

.. of bottom, 60

Depth, in fathoms, 17

Nature of bottom, sand

Direction of surface current, SW

Force of surface current, 4

Direction of bottom current, N 8 1/2 W 3/8

Force of bottom current.

Name of vessel, U. S. Fish Hawk

To what service attached, 26876

Name and rank of commanding officer, James B. Smith  
Master

Name and position of observer,

W. L. M. Wright  
Quartermaster

1252

REMARKS.

Specimens Obtained  
Starfish Skate Flounder  
Sand Crabs

# TEMPERATURE RECORD.

Instrument used. Beam Trawl

Current number of observation, 1052

Date, Aug 20<sup>th</sup> 1888

Locality, Menominee River

Bearings, Leeward WNW 3/4 E

Temperature line at 6 $\frac{1}{2}$  fathoms. Hole north

Time of day, 1050; of tide, East

State of sky, ve

Temperature of air, 69

surface of water, 65

" at depth of ~~6~~ fathoms,

" of bottom, 63

Depth, in fathoms, 10

Nature of bottom, Sand

Mud

Direction of surface current, NW

Wind

Force of surface current, 4

drift NW 18

Direction of bottom current.

Name of vessel, Seabird Fish Hawk

To what service attached, 26876

Name and rank of commanding officer, James Smith  
Captain

Name and position of observer,

Starlight  
Master

1253

REMARKS.

Specimens Obtained

Sand dollars. Conchs. Flounders.  
Manta. Sand Crabs. Kelp

## TEMPERATURE RECORD.

Instrument used, Beau Izmo.

Current number of observation. 1253

Date, Aug 28" 1888

Locality, *Menemsha Bight*

Bearings, Imperial Lead or  $1\frac{1}{8}$  E

leads W or W. Lick's Hole at 4700

Time of day, 11.05 am; of tide, Ebb

State of sky, h c

Temperature of air, 69

" surface of water, 64

" at depth of fathoms,

" of bottom, 63

Depth, in fathoms, 10

Nature of bottom,

Wind 8 m

Direction of surface current,

Force of ~~surface current~~ 4

Direction of ~~laminar~~ <sup>wife</sup> to ~~me~~ <sup>you</sup> 14

### Force of bottom current.

Name of vessel, *Gull Fish Hawk*

To what service attached 26876

To what service attached, *James A. Smith*  
Name and rank of commanding officer, *Quartermaster*

Name and position of observer,

server,  
Washington  
Greater Denver

1254

REMARKS.

Specimens Obtained  
Lobster crabs seen Robins shot  
Horned & ~~crabs~~ kelp

## TEMPERATURE RECORD.

Instrument used, *Beam Travel*

Current number of observation, 1254

Date, August 23<sup>rd</sup> 1888

Locality, Minnehaha Bridge-

Bearings. Temperature level up to 5/8 E

Geog Head N & of Leinster Hole & N  $\frac{3}{4}$  W

Time of day, 11, 23 ; of tide. East

State of sky, bc

Temperature of air,  $6^{\circ}\text{F.}$

" surface of water, 64.5"

" at depth of fathoms,

" of bottom, 43

Depth, in fathoms,

9

#### Nature of bottom.

Sand

Wind

Wind

Direction of surface current. *up 10*

## Wind

Wint.

Force of ~~surface~~ current,

free current

### Force of bottom current

Force of bottom current,  
Name of vessel 8688 Fish Hawk

To what margin applied 26 & 76

Name and rank of commanding officer *Bennet Smith*  
*Mate 26 pt*

Name and position of observer:

arver  
Johnington  
Matthew

1255-

REMARKS.

Specimens obtained  
Deep water clam shells Florida  
Bird + eggs

# TEMPERATURE RECORD.

Instrument used, Beaufort Scale

Current number of observation, 1255

Date, August 28<sup>th</sup> 1868

Locality, Morenosha Right

Bearings, Imperial Lick N & E

Gayhead W & N 90° E Lick Hole N & W 90° E

Time of day, 11:45 ; of tide, East

State of sky, Cloudy

Temperature of air, 68.5°

.. surface of water, 65°

.. at depth of fathoms,

.. of bottom, 63

Depth, in fathoms, 10 1/2

Nature of bottom, Sand

Direction of surface current, W N W

Force of surface current, 4

Direction of bottom current, W N W 1/4

Force of bottom current,

Name of vessel, U. S. Fish Hawk

To what service attached, U. S. F. S.

Name and rank of commanding officer, James A. Smith  
Mate 1st Gr.

Name and position of observer,

J. M. Lenighton  
Mate 2nd Gr.

1256

REMARKS.

Specimens obtained  
Kelp sand bottom

# TEMPERATURE RECORD.

Instrument used, thermometer

Current number of observation, 1256

Date, Aug 23<sup>rd</sup> 1888

Locality, Vineyard Sound

Bearings, West end N. N. W. land  $3\frac{1}{4}$  E

Vineyard S<sup>t</sup> St. Sh. N. N. E.  $3\frac{1}{2}$  S  $8\frac{1}{4}$  E

Time of day, 12.36 P.M. ; of tide, East

State of sky, clear

Temperature of air, 62

" surface of water, 64

" at depth of fathoms,

" of bottom, 61.

Depth, in fathoms, 16

Nature of bottom, Sand broken shells

Direction of wind N N W

Force of wind 4

Direction of drift E X N NE

Force of bottom current,

Name of vessel, Bob S Fish Hawk

To what service attached, 16876

Name and rank of commanding officer, James A. Smith  
Master 6th

Name and position of observer,

W. H. Bishop  
mate 26/2

## REMARKS.

Specimens obtained  
Kep Rock spring, Lake  
Sand Dunes, Cuyuna

## TEMPERATURE RECORD.

Instrument used, *Beam Travel*

Current number of observation, 1257

Date, Aug 23<sup>rd</sup> 1888

Locality, Vineyard Sound

Bearings, Vineyard St Ship St + W 1/2 N  
Cntry bank S 4 W 1/2 N Baghead S E 3/4 E

Time of day, 1. 08 P.M. of tide, East

State of sky, *Partly cloudy*

Temperature of air, 64

" surface of water, 64

" at depth of fathoms,

" of bottom, 59

Depth, in fathoms, 14

Nature of bottom, *Sand broken shells*Direction of ~~surface current~~ Wind WestForce of ~~surface current~~ Wind 3Direction of ~~bottom current~~ Drift NNE 1/8

Force of bottom current,

Name of vessel, *U.S. Fish Hawk*To what service attached, *U.S. Fish*Name and rank of commanding officer, *James A. Smith*  
*Mate 1st class*

Name and position of observer,

*J. M. Livingston*  
*Master Mariner*

1258

REMARKS.

Specimens obtained  
Sea Robin, Hake, skate +  
Flounders. Help

# TEMPERATURE RECORD.

Instrument used, Barometer

Current number of observation, 1258

Date, Aug 23<sup>rd</sup> 88

Locality, Vineyard Sound

Bearings, Vineyard St Ship WSW  
Bruttybank SW SSW Layhead SSW E

Time of day, 12 M<sup>th</sup> : of tide, Neat

State of sky, Cloudy

Temperature of air, 63.5°

.. surface of water, 64°

" at depth of fathoms,

" of bottom, 59

Depth, in fathoms, 15.5

Nature of bottom, Sand

Direction of surface current, Mud West

Force of surface current, Wind 5

Direction of bottom current, Drift N X E 3/8

Force of bottom current,

Name of vessel, W. & L. Fish Hawk

To what service attached, W. & L. 6

Name and rank of commanding officer, James A. Smith  
Mate 26 S. S.

Name and position of observer,

J. W. Langston  
Master M. F.

1259

REMARKS.

Specimens obtained  
Yellow sponge skate Flounders  
Kelp Haik

## TEMPERATURE RECORD.

Instrument used. Beam Trawl

Current number of observation. 1259

Date, Aug 23<sup>rd</sup> 88

Locality, Vineyard Sound

Bearings. Vineyard Lst. Ship S  $\frac{1}{2}$  W  $\frac{1}{4}$  W  $\frac{1}{4}$  W  
Tidebank S  $\frac{1}{2}$  W Gay head S  $\frac{1}{2}$  S

Time of day, 2 P.M. ; of tide, ~~Water~~ M.L.

State of sky, clear

Temperature of air, 64.5

" surface of water, 64.5"

" at depth of fathoms,

of bottom. 58, 5

Depth, in fathoms, 18

Nature of bottom, Sand

Wind West

Wine 3

### Force of bottom current

Name of vessel, *Seabird Hawk*

To what service attached. 26676

Name and rank of commanding officer,

Name and position of observer,

ver, Wellington  
Matthew

1260

REMARKS.

Specimens Obtained  
Reef shelf

## TEMPERATURE RECORD.

Instrument used, dredge  
Current number of observation, 1260  
Date, Aug 23<sup>rd</sup> 88  
Locality, Vinegar Sound  
Bearings, Vinegar Point Ship 70° + N 1/2 W  
City bank 4° + S Gay head 68° + S  
Time of day, 2.30 P.M. of tide, West  
State of sky, ve  
Temperature of air, 65  
" surface of water, 64  
" at depth of fathoms,  
" of bottom, 60  
Depth, in fathoms, 16  
Nature of bottom, sand mud & broken shells  
Direction of wind West  
Force of wind 3  
Direction of drift WSW 1/4  
Force of bottom current  
Name of vessel, Bob & John Hawks  
To what service attached, U.S. Fish Commission  
Name and rank of commanding officer,

Name and position of observer,  
*Appleton  
Mataafa*

1261

REMARKS.

Specimens Obtained  
Skate Hermit Crab Hole

## TEMPERATURE RECORD.

Instrument used.

Brown Hawk

Current number of observation, 1261

Date, August 23 88

Locality. Vineyard Sound

Bearings, Vineyard Lot Shift N W  $8^{\circ} 30' 45''$  W  
Stephens E  $8^{\circ} 30' 45''$  N Eghead N  $8^{\circ} 30' 45''$  E

Time of day, 3,06 P.M.; of tide, "neat"

State of sky, ve

Temperature of air, 64.5°

surface of water, 63

" at depth of fathoms.

... of bottom, 61

Depth, in fathoms, 14.5

Nature of bottom. *Sand*

Direction of surface wind west

Force of surface current  $\frac{d}{dt}$

Direction of Anterior or Posterior

### Force of bottom current.

Name of vessel. St. L Fish Hawk

To what service attached. 26676

Name and rank of commanding officer:

Name and position of observer

SEVERAL  
J. M. Livingston  
Waterford

1262

REMARKS.

Specimens obtained

Dead shell clams Hermit crab  
Rock sponge Puffles. Mussels  
Shred Scallop Scup Sea Robin  
Skate. Green Crabs

# TEMPERATURE RECORD.

Instrument used.

Beaufort

Current number of observation, 1262

Date, Aug 28<sup>th</sup> 88

Locality, Off Falmouth Vineyard Sound

Bearings, Falmouth Heights or 25° E

Latitude or 42° 34' N. Lat. Ch. 64 to 58° 6' E

Time of day, 10:14 AM; of tide, East

State of sky, clear

Temperature of air, 65°

" surface of water, 67

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 5

Nature of bottom, Sandy

Wind N

Direction of surface current,

Wind N

Force of surface current,

5

Direction of bottom current, Drift N E & S 17°

Force of bottom current,

Name of vessel, H. S. Fish Hawk

To what service attached, 26 S 7 E

Name and rank of commanding officer

James A. Smith  
Captain U. S. A.

Name and position of observer,

W. M. Livingston  
M. U. S. A.

1263

REMARKS.

Specimens Obtained  
Same as 1262

# TEMPERATURE RECORD.

Instrument used. Beam Trawl

Current number of observation, 1263

Date, Aug 28' 88

Locality, Off Falmouth Vineyard Sound

Bearings, Falmouth Heights N 87° W or

Latitude 41° 48' N. Long 70° 48' W. M. L. 88 48 1/4 S

Time of day, 10 2 AM; of tide, Ebb

State of sky, Partly

Temperature of air, 64

" surface of water, 67

" at depth of fathoms,

" of bottom, 67

Depth, in fathoms, 5

Nature of bottom, Sand

Direction of surface current, N W

Force of surface current, 5

Direction of bottom current, N E or 1/4

Force of bottom current,

Name of vessel, G. & G. Fish Hawk

To what service attached, U. S. F. C.

Name and rank of commanding officer, James A. Smith  
Mata Nipu

Name and position of observer,

John H. M. M. Mata Nipu

1264

REMARKS.

Specimens obtained

Mar shell starfish sea urchin  
Scallop flat fish frog eel  
Rock sponge sea weed + all green  
Concho

# TEMPERATURE RECORD.

Instrument used, Ream's Banks

Current number of observation, 1264

Date, Aug 28<sup>th</sup> 88

Locality, Off Palmetto Vineyard Sound

Bearings, Palmetto Heights N 46 $\frac{1}{2}$  E

Abkhado No 13 $\frac{1}{2}$  S. Macthup L 14 S 46 $\frac{3}{4}$  E

Time of day, 10 $\frac{1}{2}$  A.M.; of tide, Low

State of sky, Partly

Temperature of air, 66

" surface of water, 67

" at depth of fathoms,

" of bottom, 67

Depth, in fathoms, 8

Nature of bottom, Sand

Direction of ~~surface~~ current, N N W

Force of ~~surface~~ current, 5

Direction of ~~bottom~~ current, N E X E 10

Force of bottom current.

Name of vessel, 26 & 46 Fish Bank

To what service attached, 26 & 46

Name and rank of commanding officer, James A. Smith  
Mate of 26

Name and position of observer.

Johnnighton  
Mate of 26

1265

REMARKS.

Specimens Obtained

Live shell lava crabs Hermit crabs  
Rock sponge Egg cases

# TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation. 1265

Date, Aug 28 88

Locality, Off Falouth Vineyard Sand

Bearings, West chop S 46 1/4 E

Orbukit Mts. East chop Co S 84 1/4 E

Time of day, 11, 04 ; of tide, East

State of sky, 82

Temperature of air, 66

" surface of water, 67

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 10

Nature of bottom, Sand

Direction of surface current, Ward SW

Force of surface current, 5

Direction of bottom current, N E 1/8

Force of bottom current,

Name of vessel, U. S. Fish Hawk

To what service attached, 86 1/2 to

Name and rank of commanding officer, James Smith  
Master

Name and position of observer,

J. M. Wright  
Master

1266

REMARKS.

Specimen obtained  
from slow spider crab, *Leucos*  
*Crabus pallipes*

## TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1266

Date, Aug 28<sup>th</sup> 88

Locality *At Hyatt's Vineyard Stand*

Bearings. Successor to Ship 2 x 1 1/2 &  
less Beacon to 7/8. Bishop & Dake Lt + 84.0 1/4. E

Time of day, 12, 14 hr; of tide, East

State of sky, *over*

Temperature of air, 67

surface of water. 70

" at depth of fathoms,

of bottom, 69.5

Depth, in fathoms, 16.5

Nature of bottom, *Sand*

Direction of wind NW

Direction of surface current  
Wind

### Force of bottom current

Name of vessel. *St. Ma. Fish Bank*

To what service attached, *6576*

Name and rank of commanding officer *Leutnant*  
*Paul Wörn*

Name and position of observer:

John Bright  
Speaker

1267

REMARKS.

Specimens obtained  
West shell



# TEMPERATURE RECORD.

Instrument used, Bridge

Current number of observation, 1267

Date, Aug 20<sup>th</sup> 88

Locality, Off Hyannis Vineyard Sound

Bearings, Successively to Ship W + S

Collins Beacon N + S. Bishop + Gladwin N + S + 2 $\frac{1}{4}$  E

Time of day, 12:45 P.M.; of tide, Low

State of sky, Partly

Temperature of air, 66

.. surface of water, 69

.. at depth of fathoms,

.. of bottom, 69

Depth, in fathoms, 15.5

Nature of bottom, Shall broken shell

Direction of surface, SW

Force of surface current, 5

Direction of bottom current, SW + E

Force of bottom current,

Name of vessel, Galaxy Island

To what service attached, Ge. S. L.

Name and rank of commanding officer, John Morris

Master

Name and position of observer,

Johnnight  
Master

1268

REMARKS.

Guernsey Blained  
birds eggs sea moss  
Conches



## TEMPERATURE RECORD.

Beam Trawl

Instrument used,

Current number of observation, 1268

Date, Aug 21<sup>st</sup> 1888

Locality, Off Hyannis Vineyard Sound

Bearings, Unconveneate Lo Shif N 44° 1/2 W

Lat 41° 46' N Long 61° 54' E

Time of day, 12 M<sup>th</sup> P<sup>m</sup>; of tide, East

State of sky, Partly cloudy

Temperature of air, 65°

" surface of water, 68°

" at depth of fathoms,

" of bottom, 69

Depth, in fathoms, 17

Nature of bottom, Sand

Direction of surface current, Wind S W

Force of surface current, Wind S

Direction of bottom current, Wind S E W

Force of bottom current,

Name of vessel, G. L. Dr. Fish Bank

To what service attached, 20 &amp; 36

Name and rank of commanding officer, James A. Bowditch  
Master

Name and position of observer,

John M. Bright  
Master

1269

REMARKS.

Specimens obtained  
from sand



# TEMPERATURE RECORD.

Instrument used, thermometer

Current number of observation, 1269

Date, May 28 1881

Locality, Off Hyannis Vineyard Sound

Bearings, True compass Lat 41° 42' N Long 70° 30' W

Callings Beacons etc. Bishop & Gleason 1846

Time of day, 11:18 P.M. ; of tide, Low

State of sky, clear

Temperature of air, 64

" surface of water, 68.5

" at depth of      fathoms,

" of bottom, 69

Depth, in fathoms, 13.

Nature of bottom, sand

Direction of surface current, NE

Force of surface current, 5

Direction of bottom current, NE 1/4

Force of bottom current,

Name of vessel, U.S. Fish Hawk

To what service attached, U.S. Fish Hawk

Name and rank of commanding officer, James Abbott  
Master

Name and position of observer,

John M. Wright  
Master

1270

REMARKS.

Specimens obtained  
Spider Crabs, Labrador. Some  
more young except all shells

# TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1270

Date, Aug 29 1888

Locality, Off Hyannis Long Sound

Bearings, Quonochontaug Let Ship WNW 20°

Distances Beacon 4 1/2 miles. Bishop Rock 1 1/4 miles

Time of day, 1.44 P.M.; of tide, East

State of sky, Cloudy

Temperature of air, 65

" surface of water, 68

" at depth of      fathoms,

" of bottom, 69

Depth, in fathoms, 13

Nature of bottom,

Direction of surface current, W W

Force of surface current, 5

Direction of bottom current, W S S W

Force of bottom current,

Name of vessel, Old St. Fish Hawk

To what service attached, W. & F. B.

Name and rank of commanding officer, James A. Smith  
Mate M.P.

Name and position of observer,

Wm. H. M. Wright  
Mate M.P.

1271  
REMARKS.

Specimens obtained  
Spider crabs Mussels & shells  
Rock weed & sponge

## TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1271

Date, Aug 28<sup>th</sup> 88

Locality. *Off Bryan's Vining, French*

Bearings. Wisconsin Lat. 48° 27' 15" N  
Long. 112° 57' 30" E. Bishop & Blantyre 48° 26' 37" N  
Long. 112° 57' 30" E.

Time of day, 2.10 P.M.; of tide, East

State of sky, *Cloudy*

Temperature of air, 64

" surface of water, 68.

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 10

Nature of bottom, *Clay*

Direction of surface current, NNE

Direction of wind

#### Force of bottom current.

To what service attached. 16176

Name and rank of commanding officer, *James A. Emmett*  
*Major*

Name and position of observer,

Washington  
Government

1272  
REMARKS.

Specimens Obtained

Flat fish skate star fish Pelican  
Gurny sculp conch sea Robbins



# TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1272

Date, Sept 3<sup>rd</sup> 88

Locality, Cheney'sha Bight Vinson Sound

Bearings, Bay Head N 74 S

Latitude 68 1/2 N Longitude 165 1/2 W

Time of day, 10.58 ; of tide, West

State of sky, clear

Temperature of air, 68

" surface of water, 66

" at depth of " fathoms,

" of bottom, 64

Depth, in fathoms, 7

Nature of bottom, Sand

Direction of surface current, SE

Force of surface current, 3

Direction of bottom current, SE mag 18

Force of bottom current,

Name of vessel, U.S. Fish Hawk

To what service attached, U. S. F. C.

Name and rank of commanding officer, James A. Smith  
Master

Name and position of observer,

John C. Stetson  
Master

1273  
REMARKS.

Specimen obtained  
same as 1272

# TEMPERATURE RECORD.

Instrument used, Beam Therm.

Current number of observation, 1278

Date, Sept 3<sup>rd</sup> 88

Locality, Minnehaha River - Tongue Sand

Bearings, Gay Head N 78 8'

Wind NNE N 78 W Japanian Bank

Time of day, 11, 15 am ; of tide, West

State of sky, clear

Temperature of air, 68

.. surface of water, 67.5

.. at depth of fathoms,

.. of bottom, 6 1/4

Depth, in fathoms, 8

Nature of bottom, sand

Direction of surface current, NE

Force of surface current, 3

Direction of wave, W 78 S mag 40

Force of bottom current,

Name of vessel, 268 ft Fish Hawk

To what service attached, 26876

Name and rank of commanding officer, John B. Grinnell

Name and position of observer,

John B. Grinnell  
Master

1274

REMARKS.

*Hesperomys Abraimii*  
Lebster cheati seu Robins Young  
scup



## TEMPERATURE RECORD.

Instrument used, *Blau Tracol*

Current number of observation. 1274

Date, Sept 3 1911

Locality, Mononaka Ridge, Vincap, Ecuador

Bearings, Gayhead or 5/8 in

Guido Hale 5 3/4" x Imperial Carr. + 2 7/8" E

Time of day, 11.35 A.M.; of tide. ~~Low~~

State of sky, Partly cloudy

Temperature of air, 68

surface of water, 66.5

" at depth of fathoms.

of bottom, 64, 5

Depth, in fathoms,

March

#### Nature of bottom,

Wink

Direction of surface current,

Force of ~~surface~~ <sup>mean</sup> current. (3)

Direction of drift ~~bottom current~~ WNW May '48

### Force of bottom current.

Name of vessel. U.S. Fish Hawk

To what service attached. *86 A 76*

Name and rank of commanding officer:

Digitized by Google

Name and position of observer.

bsver.  
Johnston  
Maloof

1275

REMARKS.

Specimen obtained  
Same as 1274

# TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1275

Date, Sept 8<sup>th</sup> 88

Locality, Esquimalt Harbour - Vinegar Ground

Bearings, Payhead W 57° 4'

Quids Hole N W 57° 45' Carpenter's Bar N E 3/4 2

Time of day, 11 45 A.M.; of tide, Neast

State of sky, clear

Temperature of air, 68

surface of water, 69

" at depth of fathoms,

" of bottom, 64.5

Depth, in fathoms, 7

Nature of bottom, Rock

Direction of surface current, NE

Force of surface current, 3

Direction of bottom current, NE 30° mag 7

Force of bottom current,

Name of vessel, U.S. S. York Hawk

To what service attached, U.S. Z.C.

Name and rank of commanding officer, James Morris  
Master

Name and position of observer,

John Langton  
Master-at-Arms

1276

REMARKS.

Specimens Aplidium  
sand dollars



# TEMPERATURE RECORD.

Instrument used, *White Lake Stand*

Current number of observation, *1276*

Date, *Sept 3<sup>rd</sup> 88*

Locality, *Vineyard Sound*

Bearings, *Seyhead 8 m<sup>3</sup>/4 N*

*Vineyard to Shipwreck Farallon Cncl 1187 ft*

Time of day, *12.27 P.M.*; of tide, *Low*

State of sky, *clear*

Temperature of air, *68*

.. surface of water, *67*

.. at depth of fathoms,

.. of bottom, *66.5*

Depth, in fathoms, *11.5*

Nature of bottom, *Sand & mud*

Direction of surface current, *Wind & E*

Force of surface current, *Wind 3*

Direction of bottom current, *Wind & Sway 10*

Force of bottom current,

Name of vessel, *White Fish Hawk*

To what service attached, *16876*

Name and rank of commanding officer,

*James W. C. Mather*  
*Master*

Name and position of observer,

*John W. Mather*  
*Mate M.M.*

1277

REMARKS.

Specimens Obtained  
Sand dollar



## TEMPERATURE RECORD.

Instrument used, *Short Rake Wndgr*

Current number of observation, 1277

Date. Sept 3<sup>rd</sup> 88

Locality, Vineyard Sound

Bearings. Tarpaulin Coal 18 x 17 1/2 x

Vineyard St. Ship w/ 14/18 & Gay head 8/20/88

Time of day, 12, 4 & 8 P.M.; of tide, ~~Very~~

State of sky, 2 -

Temperature of air, 68

surface of water, 60°

at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 12

Nature of bottom, Sand mud

Direction of surface current: SW

Wind 2

Force of surface current,  
Direction of bottom current right west way 70°

### Force of bottom current.

Name of vessel.

To what service attached.

Name and rank of commanding officer: *John A. B. Thompson*

Name and position of observer, *J. M. Longfellow*  
*Math. Prof.*

1278

REMARKS.

Specimens obtained  
Sand dollar, skate, flat fish  
Scallops, Greenling, Crab  
Sea Urchins



## TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1278

Date. Sept 3<sup>rd</sup> 88

Locality, Vinyard Ranch

Bearings. Vineyard to Ship, 1 m x 2  $\frac{3}{4}$  m

Sepulture 6000 ft 81/2 N Gayhead 8100 1/4 N

Time of day, 1.25 P.M. ; of tide, ~~Low~~ <sup>High</sup>

State of sky, *b-e*

Temperature of air, 67

" surface of water, 65

" of bottom, 64

Depth, in fathoms, 12.5

Nature of bottom - Sand

Direction of surface current,  $\frac{3}{4} N$

Force of surface current, 2

### Force of bottom current

Name of vessel, *W. & W. Fish Hawk*

To what service attached 26 of 36

Name and rank of commanding officer, *James B. Lewis*  
*Master 36 Gray*

Name and position of observer.

Pennington

Trade Deficit

1279

REMARKS.

Specimens Obtained  
Lined sole, Pacific flat fish  
Sponges Sea Robbins, Horned robe  
Kelp Kelp sea urchins

## TEMPERATURE RECORD.

Instrument used, Beam Trave

Current number of observation, 1279

Date, July 3<sup>rd</sup> 88

Locality. Vonyavt Sound

Bearings. Vineyard St Slip, WNW

Tarponlin 6000 ft. & 8 Bayhead 8' W/S

Time of day, 1-54 ; of tide, Sweet

State of sky, 8c

Temperature of air, 67

" surface of water, 45

" at depth of fathoms,

" of bottom, 64

Depth, in fathoms, 15

Nature of bottom, Sand

Wind S E

Direction of surface current  
Friend 2

Direction of ~~Westerly~~ <sup>Westerly</sup> 20° to 30° N. ~~Westerly~~ <sup>Westerly</sup> 20° to 30° N.

### Force of bottom current.

Name of vessel. U. S. S. Fish Hawk

To what service attached. *Vol 76*

Name and rank of commanding officer.

Name and position of observer,

1280

REMARKS.

Specimens obtained

Sand dollars, Star fish, Peclines  
Sea Robbins, Sea urchins, Hermit Crabs  
Sand crabs, Flat fish, Sea Raisers



# TEMPERATURE RECORD.

Instrument used, Barometer

Current number of observation, 1280

Date, Sept 8<sup>th</sup> 88

Locality, Vineyard Sound

Bearings, Vineyard St Ship 4 m x ne  $\frac{3}{4}$  nw

Isopellic Bank ne  $\frac{1}{4}$  nw Gay Head sw  $\frac{3}{4}$  ne

Time of day, 2.15 P.M. : of tide, East

State of sky, bc

Temperature of air, 72

.. surface of water, 69

.. at depth of fathoms,

.. of bottom, 63

Depth, in fathoms, 16

Nature of bottom, Sand shell

Direction of wind SE

Force of surface current.

Direction of surface current, SE mag 18

Force of bottom current.

Name of vessel, U.S. Fish Hawk

To what service attached, U.S. Fish Hawk

Name and rank of commanding officer, James S. Smith  
Mat. Ref. m

Name and position of observer,

J. A. Livingston  
Grad. 2d fl

1281

REMARKS.

Specimen obtained  
Thunder, Lemmings, ~~leptodon~~  
King Jinks, Tautog



## TEMPERATURE RECORD.

Instrument used, *Bear Paw*

Current number of observation, 1281

Date, Sept 5<sup>th</sup> 88

Locality, Vineyard Sound

Bearings. ~~Wobahn 25-3244 W 1/2 W~~

West Libby  $8\frac{1}{4}$  N East Libby  $5\frac{1}{2} 6\frac{1}{4}$  E

Time of day, 2.40 P.M. : of tide, ~~west~~

State of sky, ve

Temperature of air, 70

surface of water, 69

" at depth of fathoms.

of bottom. 70

of bottom, 13

Depth, in fathoms, 63

Nature of bottom, *Sand*

Direction of ~~current~~ current of air

Direction of current  
wind

#### Force of bottom current.

Name of vessel, W. S. Atk. Fish Hawk

To what service attached, 16176

Name and rank of commanding officer, *James A. Smith*  
*Master*

Name and position of observer,

river.  
Amherst  
Mass.

1282

REMARKS.

Specimens obtained  
and loaned Dr Robbins  
Spider Crabs, Kelp, Beach  
shells,



## TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation. 1282

Date, Sept 5<sup>th</sup> 88

Locality, Vineyard Sound

Bearings, *Noblesa* or  $\frac{1}{4}$  N

West limb  $8\frac{5}{8}$  N East limb  $3 \times 6\frac{1}{8}$  E

Time of day, 3 P.M. ; of tide, flood

State of sky, overcast

Temperature of air. 70

" surface of water, 67

" at depth of fathoms.

### 6. *of bottom*

Depth, in fathoms, 5

Nature of bottom, *Sand*

Direction of surface current SW

Force of surface current 2

Direction of ~~bottom~~ current. Shift SW & W mag 1/1

### Force of bottom current.

Name of vessel. 86 & 87 Fish Hawk

To what service attached. *Do b 7c*

Name and rank of commanding officer

James A. Smith  
State Dept.

Name and position of observer,

Specimens obtained  
Lantern crab sponge  
Spider crab, Horned crab  
Dead shell or star fish



## TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1282

Date, Sept 5<sup>th</sup> 88

Locality, Vineyard Sound

Bearings, *Woboka*  $W\frac{1}{8}S$

West Bishop 8 w  $\frac{1}{4}$  S East Bishop 8 x w  $\frac{3}{4}$  w

Time of day, 3, 38 *PM*; of tide, *west*

State of sky, clear

Temperature of air, 68

surface of water. 69

" at depth of fathoms,

" of bottom, 69

Depth, in fathoms, 13

Nature of bottom, Sand

Wind SW  
Direction of surface current SW

Direction of ~~Wind~~ <sup>Wind</sup> 15

Force of surface current, 100 ft mag  
Direction of bottom current, 5 & 1 5/8 E 70°

### Force of bottom current,

Name of vessel, Clapp's Fish Hawk

To what service attached. 26 of 76

Name and rank of commanding officer, *James A. Smith*  
*Major*

Name and position of observer,

server,  
J. M. Lenox  
Mass. Aug.

## REMARKS.

Specimens Obtained  
Spider crabs. Normal crabs  
Sand crabs. Rock shells  
Sponges

1900-01-02-03-04

1900-01-02-03-04

1900-01-02-03-04

1900-01-02-03-04

1900-01-02-03-04



## TEMPERATURE RECORD.

Instrument used, Beam Trawl

Current number of observation, 1284

Date, Sept 5<sup>th</sup> 88

Locality, Vireyant. Sennar.

Bearings, *Abeka* w/ $\frac{1}{8}$  in

West slope SW East slope SW  $\times$  S $\frac{1}{2}$  S

Time of day, 6:10 P.M. ; of tide, ~~low~~

State of sky, bc

Temperature of air, 68

" surface of water, 69

" at depth of fathoms,

" of bottom, 69

Depth, in fathoms, 6

Nature of bottom, *sand*

Direction of ~~current~~ <sup>Wind</sup> ~~current~~ E & E

Force of ~~surface current~~ Wind 3

Direction of ~~bottom current~~ <sup>wife</sup> West May '14

### Force of bottom current.

Name of vessel, St. S. Fish Hawk

To what service attached. *Det 4 b*

Name and rank of commanding officer. *James A. Smith*  
*Major*

Name and position of observer.

W. V. T.  
Wilmington  
Male Wif

1285

REMARKS.

Specimens Obtained  
Spider crabs sponge *Leptoclinides*  
Young sculp. Swell fish

Spine fish larva of *Leptoclinides* *viridis*

Spine fish larva of *viridis*

Young of *Leptoclinides*

of *Leptoclinides*

as above of *Leptoclinides*

Young of *Leptoclinides*

Young of *Leptoclinides*

Young of *Leptoclinides*

Young of *Leptoclinides* of *Leptoclinides*

Young of *Leptoclinides*

Young of *Leptoclinides*

Young of *Leptoclinides*

Young of *Leptoclinides* of *Leptoclinides*

Young of *Leptoclinides*

LEPTOCLINIDES *LEPTOCLINIDES*

## TEMPERATURE RECORD.

Instrument used, Beam Travel

Current number of observation, 1285

Date, Sept 5<sup>th</sup> 88

Locality, Vineyard Ground

Bearings, Tarponkin Cove 90 x 8 1/8 x 8

Gughead 8 w 78 w mat lehrp 82 1/8 8

Time of day, 5 P.M. ; of tide, Ebb.

### State of sky,

Temperature of air, 69

surface of water, 68

" at depth of fathoms,

" of bottom, 68

Depth, in fathoms, 12

Nature of bottom,

Direction of surface current, East

Force of surface current, *Wind* *Le*

Direction of bottom current, SW at mag

### Force of bottom current.

Name of vessel, St. Ives Hawk

To what service attached, *See 470*

Name and rank of commanding officer, *James Abbott Smith*  
*Major John*

Name and position of observer,

Johnnighan  
Mass. 1874

**REMARKS.**

Scallop 898m

B & Lelaw N 76. E

6 Beacon St S.E.

Ships Head Nat 'Et N. 1/1276

Gay Head 949-21

Mayard St Ships N 74° W

Tarponkin lewisi - N 40° E